

[4910-13-P]

#### DEPARTMENT OF TRANSPORTATION

**Federal Aviation Administration** 

**14 CFR Part 39** 

[Docket No. FAA-2016-3705; Directorate Identifier 2015-NM-168-AD; Amendment 39-18837; AD 2017-06-13]

RIN 2120-AA64

**Airworthiness Directives;** Textron Aviation Inc. (Type Certificate Previously Held by Cessna Aircraft Company) Airplanes

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for certain Textron Aviation Inc. (Textron) Model 680 airplanes. This AD was prompted by Textron's report of a manufacturing defect that affects the durability of the aft canted bulkhead metallic structure. This AD requires repetitive inspections of the aft canted bulkhead; repair if necessary; and a modification, which would terminate the repetitive inspections. We are issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For service information identified in this final rule, contact Textron Aviation Inc., P.O. Box 7706, Wichita, KS 67277; telephone 316-517-6215; fax 316-517-5802; email citationpubs@txtav.com; Internet https://support.cessna.com/custsupt/csupport/newlogin.jsp. You may review this

referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221. It is also available on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2016-3705.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2016-3705; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Docket Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Phuoc Le, Aerospace Engineer, Airframe Branch, ACE-118W, Wichita Aircraft Certification Office (ACO), FAA, 1801 Airport Road, Room 100, Dwight D. Eisenhower Airport, Wichita, KS 67209; phone: 316-946-4195; fax: 316-946-4107; email: phuoc.le@faa.gov.

#### SUPPLEMENTARY INFORMATION:

#### **Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Textron Aviation Inc. Model 680 airplanes. The NPRM published in the <u>Federal Register</u> on February 26, 2016 (81 FR 9790) ("the NPRM"). The NPRM was prompted by Textron's report of a manufacturing defect that affects the durability of the aft canted bulkhead metallic structure. The manufacturing defect directly affects the bond integrity of the vertical and horizontal stiffeners on the aft canted bulkhead metallic structure. The NPRM proposed to require repetitive inspections

of the aft canted bulkhead and repair if necessary. The NPRM also proposed to require a modification which would terminate the repetitive inspections. We are issuing this AD to prevent disbonding of the horizontal and vertical stiffeners on the aft canted bulkhead. Loss of bond integrity could result in a structural failure that could lead to separation of the cruciform tail and loss of control of the airplane.

#### Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the NPRM and the FAA's response to each comment.

### Request to Limit Findings to "Disbonding"

NetJets Aviation, Inc. (NetJets) requested that we revise paragraph (h) of the proposed AD to remove "cracked paint" as a possible finding from the inspection.

NetJets acknowledged that cracked paint, while not a safety concern on its own, should be investigated to ensure that it is not evidence of disbonding. NetJets indicated that the requirement for a disbond to be repaired per an alternative method of compliance (AMOC) is sufficient to ensure that the safety concern is addressed appropriately.

We agree with the commenter that cracked paint may not be a safety concern on its own; however it is evidence that a disbond of the structure may have occurred and should be investigated further to ensure there is no evidence of disbonding. Thus, if cracked paint is found, operators must contact the FAA for procedures to determine whether the cracked paint was an indication of disbonding. We have revised paragraph (h) of this AD to clarify that operators must obtain instructions from the FAA and comply with those instructions.

### Request to Have Cessna Engineering Drawing be Made Available

NetJets indicated that paragraph (n)(2) of the proposed AD states that the required service information is available from Textron. However, Netjets stated that Textron does

not provide owners/operators with access to Cessna Engineering Drawing 6991115 ("Drawing 6991115"), which is required for compliance with paragraph (i) of the proposed AD. NetJets added that the required service information is not available at the Federal Register and is not available to owners/operators through the source identified in the proposed AD. NetJets indicated that Cessna Service Bulletin SB680-53-08, dated September 28, 2015, states that only Textron-owned service centers can complete the modification and have access to Drawing 6991115. NetJets stated that access to Drawing 6991115 should be made available to owners/operators, and the proposed AD should state that compliance at a Textron-owned service center is not required by the AD.

We acknowledge that Drawing 6991115 is not available to owners/operators. However, drawing 6991115 is only used for an airplane that is modified at a Textronowned service center. Cessna Service Bulletin SB680-53-08, Revision 2, dated November 2, 2016 ("SB680-53-08, Revision 2") (issued after the NPRM was published), includes a reference to Cessna Engineering Drawing 6991119 ("Drawing 6991119"), which should be available to owners/operators and contains approved data for owners/operators who choose to modify their airplanes at a non-Textron-owned service center. We have revised paragraph (i) of this AD to refer to SB680-53-08, Revision 2.

### Request to Include the Revision Level for Cessna Engineering Drawing

NetJets requested that the revision level for Drawing 6991115 be added to paragraph (i) of the proposed AD, and that paragraph (i) of the proposed AD allow later revisions to Drawing 6991115. Paragraph (i) of the proposed AD would require compliance with Cessna Service Bulletin SB680-53-08, dated September 28, 2015, which contains a reference to the modification instructions contained in Drawing 6991115. Because neither Cessna Service Bulletin SB680-53-08, dated September 28, 2015, nor paragraph (i) of the proposed AD specifies the revision level of Drawing 6991115 that would be required for compliance with the proposed AD, NetJets asserted that it is not

possible for an owner/operator to comply with its responsibility to ensure that FAA approval was obtained.

We partially agree that there is a need to specify acceptable revision levels of Drawing 6991115. However, with the release of SB680-53-08, Revision 2, Drawing 6991115 is no longer applicable for the owners/operators who elect to accomplish SB680-53-08, Revision 2, at a non-Textron facility. Instead, the revision levels of Drawing 6991119 are now applicable for the owners/operators who will accomplish SB680-53-08, Revision 2, at a non-Textron facility. Although SB680-53-08, Revision 2, specifies using the latest revision of Drawing 6991119, this AD allows use of any revision level of that drawing. We have added paragraph (k) to this AD to specify this provision; subsequent paragraphs have been redesignated accordingly. We have reviewed all existing revisions of Drawing 6991119, and have found all to be acceptable. In addition, paragraph (i) of this AD has been revised to specify compliance with SB680-53-08, Revision 2.

#### Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this AD with the changes described previously and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

## Related Service Information under 1 CFR part 51

We reviewed the following Cessna service information.

- Cessna Service Letter SL680-53-05, Revision 2, dated September 30, 2015. The service information describes procedures for a general visual inspection for disbonding and paint cracking around the edges of the stiffeners on the aft canted bulkhead.
- Cessna Service Bulletin SB680-53-08, Revision 2, dated November 2, 2016. The service information describes procedures for modifying the airplane by installing additional stiffeners to the aft canted bulkhead.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

# **Costs of Compliance**

We estimate that this AD affects 123 airplanes of U.S. registry. We estimate the following costs to comply with this AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspection	1 work-hour X \$85 per hour = \$85 per inspection cycle	\$0	\$85 per inspection cycle	\$10,455 per inspection cycle
Modification	180 work-hours X \$85 per hour = \$15,300	\$3,190	\$18,490	\$2,274,270

We have received no definitive data that would enable us to provide cost estimates for the on-condition actions specified in this AD.

According to the manufacturer, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not

control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
  - (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

#### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

### § 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**2017-06-13 Textron Aviation Inc.** (Type Certificate Previously Held by Cessna Aircraft Company): Amendment 39-18837; Docket No. FAA-2016-3705; Directorate Identifier 2015-NM-168-AD.

### (a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### (b) Affected ADs

None.

### (c) Applicability

This AD applies to Textron Aviation Inc. (Type Certificate previously held by Cessna Aircraft Company) Model 680 airplanes, certificated in any category, as identified in paragraphs (c)(1) and (c)(2) of this AD.

(1) Model 680 Sovereign airplanes (commonly known as Citation Sovereign airplanes), having serial numbers: 680-0001, -0002, -0006, -0025, -0030, -0031, -0032, -0046, -0051, -0057, -0064, -0066, -0067, -0082, -0104, -0108, -0112, -0118,

-0120, -0125, -0132, -0139, -0140, -0141, -0144, -0147, -0148, -0149, -0153, -0157, -0160, -0162, -0163, -0164, -0166, -0167, -0169, -0170, -0171, -0173, -0174, -0175, -0176, -0177, -0178, -0179, -0180, -0182, -0183, -0185, -0186, -0192, -0193, -0196, -0200, -0202, -0204, -0205, -0206, -0208, -0211, -0216, -0220, -0221, -0222, -0227, -0229, -0230, -0231, -0234, -0235, -0236, -0238, -0241, -0242, -0243, -0245, -0246, -0249, -0252, -0253, -0255, -0256, -0257, -0258, -0260, -0262, -0268, -0270, -0271, -0280, -0282, -0283, -0284, -0285, -0289, -0291, -0292, -0296, -0297, -0300, -0301, -0302, -0303, -0304, -0306, -0307, -0313, -0315, -0317, -0318, -0322, -0323, -0324, -0327, -0328, -0329, -0333, -0334, -0336, -0337, -0339, -0340, -0342, -0344, -0346, -0347, -0348, and -0349.

(2) Model 680 Sovereign airplanes (commonly known as Citation Sovereign+airplanes) having serial numbers: 680-0501, -0504, -0505, -0509, -0510, -0511, -0512, -0513, -0514, -0515, -0516, -0517, -0519, -0520, -0522, -0524, -0525, -0526, -0527, and -0531.

#### (d) Subject

Air Transport Association (ATA) of America Code 53, Fuselage.

### (e) Unsafe Condition

This AD was prompted by Textron's report of a manufacturing defect which affects the durability of the aft canted bulkhead metallic structure. The manufacturing defect directly affects the bond integrity of the vertical and horizontal stiffeners on the aft canted bulkhead metallic structure. We are issuing this AD to prevent disbonding of the horizontal and vertical stiffeners on the aft canted bulkhead. Loss of bond integrity could result in a structural failure that may lead to separation of the cruciform tail and loss of control of the airplane.

### (f) Compliance

Comply with this AD within the compliance times specified, unless already done.

### (g) Repetitive Inspections

Before the accumulation of 7,000 total flight hours, or within 100 flight hours after the effective date of this AD, whichever occurs later, perform a general visual inspection for disbonding and paint cracking around the edges of the stiffeners on the aft canted bulkhead, in accordance with the Accomplishment Instructions of Cessna Service Letter SL680-53-05, Revision 2, dated September 30, 2015. Repeat the general visual inspection thereafter at intervals not to exceed 100 flight hours, until the modification required by paragraph (i) of this AD is accomplished.

### (h) Repair

If, during any inspection required by paragraph (g) of this AD, any disbonding or cracked paint is found, before further flight, obtain instructions approved by the Manager, Wichita Aircraft Certification Office (ACO), ACE-118W, FAA, and, within the compliance time specified in those instructions, accomplish the instructions accordingly.

### (i) Modification

At the applicable compliance time specified in paragraph (i)(1) or (i)(2) of this AD, modify the airplane by installing additional stiffeners on the aft canted bulkhead, in accordance with the Accomplishment Instructions of Cessna Service Bulletin SB680-53-08, Revision 2, dated November 2, 2016, except as provided by paragraphs (k) and (l) of this AD. Doing this modification terminates the repetitive inspections required by paragraph (g) of this AD.

- (1) For airplanes that have accumulated 7,000 or more total flight hours as of the effective date of this AD: Within 1,800 flight hours or 24 months, whichever occurs first, after the effective date of this AD.
- (2) For airplanes that have accumulated less than 7,000 total flight hours as of the effective date of this AD: Within 3,600 flight hours or 48 months, whichever occurs first, after the effective date of this AD.

### (j) Credit for Previous Actions

- (1) This paragraph provides credit for actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Cessna Service Letter SL680-53-05, dated December 22, 2014; or Cessna Service Letter SL680-53-05, Revision 1, dated March 12, 2015.
- (2) This paragraph provides credit for actions required by paragraph (i) of this AD, if those actions were performed before the effective date of this AD using Cessna Service Bulletin SB680-53-08, dated September 28, 2015.

## (k) Exceptions to Service Information Specifications

Although Cessna Service Bulletin SB680-53-08, Revision 2, dated November 2, 2016, specifies using the latest revision of Drawing 6991119, this AD allows using any revision level of that drawing.

### (I) Provisions Regarding Reporting

Although Cessna Service Bulletin SB680-53-08, Revision 2, dated November 2, 2016; and Cessna Service Letter SL680-53-05, Revision 2, dated September 30, 2015; specify to submit certain information to the manufacturer, this AD does not include that requirement.

### (m) Special Flight Permit

Special flight permits, as described in Section 21.197 and Section 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199), are not allowed.

#### (n) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Wichita ACO, ACE-118W, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the

manager of the ACO, send it to the attention of the person identified in paragraph (o)(1) of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

#### (o) Related Information

- (1) For more information about this AD, contact Phuoc Le, Aerospace Engineer, Airframe Branch, ACE-118W, Wichita Aircraft Certification Office (ACO), FAA, 1801 Airport Road, Room 100, Dwight D. Eisenhower Airport, Wichita, KS 67209; phone: 316-946-4195; fax: 316-946-4107; email: phuoc.le@faa.gov.
- (2) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (p)(3) and (p)(4) of this AD.

# (p) Material Incorporated by Reference

- (1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.
  - (i) Cessna Service Letter SL680-53-05, Revision 2, dated September 30, 2015.
  - (ii) Cessna Service Bulletin SB680-53-08, Revision 2, dated November 2, 2016.
- (3) For service information identified in this AD, contact Textron Aviation Inc., P.O. Box 7706, Wichita, KS 67277; telephone 316-517-6215; fax 316-517-5802; email citationpubs@txtav.com; Internet

https://support.cessna.com/custsupt/csupport/newlogin.jsp.

(4) You may view this service information at the FAA, Transport Airplane

Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of

this material at the FAA, call 425-227-1221.

(5) You may view this service information that is incorporated by reference at the

National Archives and Records Administration (NARA). For information on the

availability of this material at NARA, call 202-741-6030, or go to:

http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Renton, Washington, on March 16, 2017.

Dionne Palermo,

Acting Manager,

Transport Airplane Directorate,

Aircraft Certification Service.

[FR Doc. 2017-05771 Filed: 3/27/2017 8:45 am; Publication Date: 3/28/2017]

13